

# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/IB2004/002936

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C07K16/00 C07K14/00 A61K47/48 C12N5/20 C07K19/00  
A61K45/00 A61K47/00 C07K16/46 C12N1/15 C12N15/85

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C07K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, BIOSIS, CHEM ABS Data

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	WO 01/64738 A (AVRAMEAS EUSTRATE ; DIATOS S A (FR); TERNYNCK THERESE (FR)) 7 September 2001 (2001-09-07) cited in the application CAP37 derived peptide (claim 11) shows 94% identity with SEQ ID N°1 over 17 aa and 82% with SEQ ID 2; Peptide DPV10 (claim 17) shows 100% identity with SEQ ID N°3 over 14 aa; same family as FR2805821	1-28
Y	WO 03/018636 A (AVRAMEAS EUSTRATE ; DIATOS S A (FR)) 6 March 2003 (2003-03-06) CAP37 peptide DPV15 (example 1) shows 94% identity with SEQ ID N°1 over 17 aa; Peptide DPV15 shows 82% identity with SEQ ID N°2 over 16 aa; see claim 4, 12; Geneseq entry ABP59497 shows similar motif	1-28

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

### \* Special categories of cited documents :

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

- \*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- \*Z\* document member of the same patent family

Date of the actual completion of the international search

31 January 2005

Date of mailing of the international search report

10/02/2005

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax: (+31-70) 340-3016

Authorized officer

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P,X	WO 03/106491 A (MEIKAS ANNE ; SOOMETTS URSEL (EE); KOGERMAN PRIIT (EE); POOGA MARGUS (E) 24 December 2003 (2003-12-24) Many peptides disclosed in the application contain the identical peptide motif BBXBXXB claimed (e.g SEQ ID N°15163, 15165, 15165, 22091, ...)	1-28
P,X	WO 03/092736 A (FRANDSEN TORBEN PETER ; PANTHECO AS (DK); TOLBORG JAKOB (DK); JOHANSEN) 13 November 2003 (2003-11-13) the whole document	1-28
A	WO 94/28921 A (DEMETER BIOTECH LTD) 22 December 1994 (1994-12-22) Some peptides show a high level of identity with general consensus sequences containing a high number of basic residues the whole document	1-18
A	WO 99/07414 A (SARON MARIE FRANCOISE ; BLONDEL BRUNO (FR); BUTTIN GERARD (FR); ZIPETO) 18 February 1999 (1999-02-18) the whole document	1-18
A	NIIDOME TAKURO ET AL: "Chain length of cationic alpha-helical peptide sufficient for gene delivery into cells" BIOCONJUGATE CHEMISTRY, vol. 10, no. 5, September 1999 (1999-09), pages 773-780, XP0000854008 & ISSN: 1043-1802 the whole document	1-18
A	AVRAMEAS A ET AL: "Efficient gene delivery by a peptide derived from a monoclonal anti-DNA antibody" BIOCONJUGATE CHEMISTRY, AMERICAN CHEMICAL SOCIETY, WASHINGTON, US, vol. 10, no. 1, January 1999 (1999-01), pages 87-93, XP002958138 ISSN: 1043-1802 the whole document	1-18

## FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box II.2

Claims Nos.: 1-18 (all partially)

Present claims 1-18 relate to an extremely large number of possible amino-acid sequences. Support within the meaning of Article 5 PCT is to be found, however, for only a portion of the polypeptides claimed. In the present claims, the claims so lack support, and the application so lacks disclosure, that a meaningful search over the whole of the claimed scope is impossible.

Consequently, the search has been carried out for those part of the claims which appear to be supported, and disclosed in the examples.

The applicant's attention is drawn to the fact that claims relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure. If the application proceeds into the regional phase before the EPO, the applicant is reminded that a search may be carried out during examination before the EPO (see EPO Guideline C-VI, 8.5), should the problems which led to the Article 17(2) declaration be overcome.

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## Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☒ Claims Nos.: 1-18 (all partially)  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:  
see FURTHER INFORMATION sheet PCT/ISA/210
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; It is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/IB2004/002936

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 0164738	A	07-09-2001	FR 2805821 A1	07-09-2001
			AU 4074801 A	12-09-2001
			BR 0108847 A	18-02-2003
			CA 2401613 A1	07-09-2001
			EP 1259541 A2	27-11-2002
			WO 0164738 A2	07-09-2001
			JP 2003528596 T	30-09-2003
			US 2003199677 A1	23-10-2003
WO 03018636	A	06-03-2003	US 2003153490 A1	14-08-2003
			BR 0212203 A	21-09-2004
			CA 2458866 A1	06-03-2003
			EP 1427758 A2	16-06-2004
			WO 03018636 A2	06-03-2003
			US 2003199677 A1	23-10-2003
WO 03106491	A	24-12-2003	WO 03106491 A2	24-12-2003
WO 03092736	A	13-11-2003	WO 03092736 A2	13-11-2003
WO 9428921	A	22-12-1994	AU 7050294 A	03-01-1995
			US 6559281 B1	06-05-2003
			WO 9428921 A1	22-12-1994
			US 5561107 A	01-10-1996
			US 6084156 A	04-07-2000
			US 5773413 A	30-06-1998
			US 5744445 A	28-04-1998
			US 5968904 A	19-10-1999
			US 5955573 A	21-09-1999
			US 6001805 A	14-12-1999
			US 6018102 A	25-01-2000
WO 9907414	A	18-02-1999	FR 2766826 A1	05-02-1999
			AU 8988098 A	01-03-1999
			CA 2298934 A1	18-02-1999
			EP 1001815 A1	24-05-2000
			WO 9907414 A1	18-02-1999
			JP 2001513335 T	04-09-2001
			US 2003206900 A1	06-11-2003
			US 6635248 B1	21-10-2003